

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: KELLY A. GARDNER  
SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
5030 SUGARLOAF PWKY, (ATL 4.3.517)  
LAWRENCEVILLE, GA 30044

## PCT

WRITTEN OPINION

(PCT Rule 66)

<p>To: KELLY A. GARDNER SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PWKY, (ATL 4.3.517) LAWRENCEVILLE, GA 30044</p>		<p>Date of Mailing (day/month/year) <b>25 JUL 2001</b></p>
<p>Applicant's or agent's file reference <b>F-5704-PC</b></p>	<p>REPLY DUE within <b>TWO</b> months from the above date of mailing</p>	
<p>International application No. <b>PCT/US00/15952</b></p>	<p>International filing date (day/month/year) <b>09 JUNE 2000</b></p>	<p>Priority date (day/month/year) <b>11 JUNE 1999</b></p>
<p>International Patent Classification (IPC) or both national classification and IPC Please See Supplemental Sheet.</p>		
<p>Applicant <b>SCIENTIFIC-ATLANTA</b></p>		

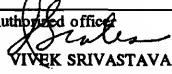
1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step or industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.
 

When? See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).~~

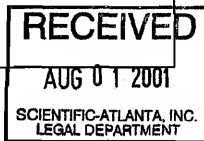
How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.  
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 11 OCTOBER 2001.

<p>Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231</p>	<p>Authorized officer  <b>VIVEK SRIVASTAVA</b></p>
<p>Facsimile No. (703) 305-3230</p>	<p>Telephone No. (703) 305-4038</p>

Form PCT/IPEA/408 (cover sheet) (July 1998)\*



**I. Basis of the opinion****1. With regard to the elements of the international application:\***

☒ the international application as originally filed  
the description:  
pages 1-27, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of

☒ the claims:  
pages 28-31, as originally filed  
pages NONE, as amended (together with any statement) under Article 19  
pages NONE, filed with the demand  
pages NONE, filed with the letter of

☒ the drawings:  
pages 1-4, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of

☒ the sequence listing part of the description:  
pages NONE, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:**

- ☐ contained in the international application in printed form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**4. ☒ The amendments have resulted in the cancellation of:**

☒ the description, pages NONE  
☒ the claims, Nos. NONE  
☒ the drawings, sheets/fig. NONE

**5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed".

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. statement**

Novelty (N)	Claims	(Please See supplemental sheet)	YES
	Claims	(Please See supplemental sheet)	NO
Inventive Step (IS)	Claims	(Please See supplemental sheet)	YES
	Claims	(Please See supplemental sheet)	NO
Industrial Applicability (IA)	Claims	(Please See supplemental sheet)	YES
	Claims	(Please See supplemental sheet)	NO

**2. citations and explanations**

Claims 1-4, 7, 9, 10, 13-15, 17 and 19-23 lack novelty under PCT Article 33(2) as being anticipated by Brown. Considering claims 1, 7, 14 and 19, Brown discloses the claimed digital home communication terminal and the claimed manager and system for allocating bandwidth in a digital broadband system (col 3 line 22 - col 5 line 50, col 7 line 13 - col 8 line 30, fig 3A, fig 4).

Considering claims 2, 9, and 21, Brown discloses the claimed video-on-demand (col 3 line 52 - col 4 line 15).

Considering claims 3, 13 and 22, Brown discloses the claimed content delivery mode (see NVOD in col 7 lines 13 - 20).

Considering claims 4, 10, 17 and 23, Brown discloses the claimed video-on-demand request (col 3 line 52 - col 4 line 15).

Considering claim 15, Brown discloses the claimed tuner (col 3 line 52 - col 4 line 15).

Considering claim 20, Brown discloses the claimed bandwidth allocation schedule (col 3 line 52 - col 4 line 15, col 7 line 13 - col 8 line 30).

Claims 5, 6, 8, 11, 12, 16, 18 and 24-26 lack an inventive step under PCT Article 33(3) as being obvious over Brown. It would have been obvious to modify Brown to include the claimed features.

Regarding claims 5, 11, 18 and 24, Brown fails to disclose the claimed allocation criteria received from the subscriber comprises a plurality of subscriber reservation requests with at least two assigned priorities. It would have been obvious to modify Brown to include the claimed two priorities to provide monitoring of which programs a user finds interesting to provide customized programming to a user.

Regarding claims 6, 12, 25 and 26 Brown fails to disclose a bandwidth allocation manager processing a plurality of allocation criteria according to a statistical model to determine a bandwidth allocation schedule. It would have been obvious to include a bandwidth allocation manager for processing a plurality of allocation criteria according to a statistical model and to determine a bandwidth allocation schedule to allocate bandwidth in accordance with peak and non-peak times to maximize the (Continued on Supplemental Sheet.)

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

**CLASSIFICATION:**

The International Patent Classification (IPC) and/or the National classification are as listed below:

IPC(7): HO4N 7/173, 5/445; G06F 3/00, 13/00 and US Cl.: 725/86, 87, 93, 95, 96, 97, 44, 45, 46, 47; 375/240, 2 40.01, 370/235, 229, 230

**V. 1. REASONED STATEMENTS:**

The opinion as to Novelty was positive (YES) with respect to claims 5, 6, 8, 11, 12, 16, 18, 24-26.

The opinion as to Novelty was negative (NO) with respect to claims 1-4, 7, 9, 10, 13-15, 17, 19-23.

The opinion as to Inventive Step was positive (YES) with respect to claims NONE.

The opinion as to Inventive Step was negative (NO) with respect to claims 1-26.

The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-26.

The opinion as to Industrial Applicability was negative (NO) with respect to claims NONE.

**V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):**

efficiency of allocating bandwidth according to the traffic and congestion on the network.

Regarding claim 8, Brown fails to disclose the claimed VOD application server in communication with the bandwidth allocation manager, wherein the VOD application server transmits a list of available content delivery modes to the bandwidth allocation manager.

Brown discloses determining a VOD or NVOD mode of transmission depending on the available bandwidth. It would have been obvious to include the claimed VOD server in communication with the bandwidth allocation manager to provide the available modes of servicing a subscribers request based on the bandwidth available to efficiently allocate bandwidth to prevent transmitting data above the threshold capacity of the network.

Regarding claim 16, Brown fails to disclose the claimed channel allocation information comprises VOD catalogue data. It would have been obvious to provide channel allocation information to provide a user with an organized list of available programming from a which a user can select.

**NEW CITATIONS**

US 5,771,435 A (BROWN) 23 June 1998, see col. 2, lines 47-67, col. 3, lines 22-67, col. 4, lines 1-67, col. 6, lines 1-36, col. 7, lines 1-67, col. 8, lines 13-67

US 5,682,597 A (GANEK et al) 28 October 1997, Abstract